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"O fortunatos nimium sua si bona norint
Agricolae." . . . VIRG.

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AGRICULTURE.

Address from Athanasius Fenwick, Esq. to the AGRICULTURAL SOCIETY of *St. Mary's County, (Md.)* communicated by E. J. MILLARD, for insertion, by order of said society, in the *American Farmer*.

WE have reason to congratulate each other on the excellent dispositions which have produced this assemblage. It is evident from its respectability, that our community feels deeply the spirit of improvement; the laudable desire of amending our condition, by availing ourselves of the knowledge which is diffusing itself in neighbouring districts and states. No reflection can be more delightful to the moralist and patriot, than that which arises in the mind of him who perceives that now that it has pleased Providence to give peace to the civilized world, that every virtuous and intelligent man, grateful for the blessing, seems at length heartily disposed to devote all his talents and his labours to the objects most worthy of them, the promotion of the arts and sciences, thereby to better the habits of men, and increase the productions of labour.

Agriculture, the most ancient of all the sciences, and the most necessary to supply the wants of man, yet so little understood, because the most difficult of all others, is the branch which it has fallen to our lot in life to pursue, practically. On the extent of our acquirements in this branch of knowledge depends nearly all our income, all our comforts, all our means of doing good; of course our independence and respectability. The strength, power and happiness of the nation to which we belong, are also derived from this vast source of wealth. Every inducement therefore, which can operate upon us in our individual capacity, or as heads of families, or as members of society, invite us to increase and diffuse our share of that kind of knowledge which is the chief business of our life. Knowledge, says the great Lord Bacon, is power, and whoever possesses a great share of knowledge, is insensibly impelled to active exertion, to constant application to business, to great industry, and thereby his wealth, utility and respectability cannot fail to increase.—What is it that engenders slothful habits of lounging, that causes so many tedious hours to be spent in idle chat, in listless torpor and insipid amusements; that causes those nurseries of laziness, extravagance, gaming, and intemperance, to be the most frequent resort of our people? Why, habits produced by ignorance: The want of knowing how to produce ten fold more comforts by staying at home and how to carry on the business and improvement of their farms, with a degree of profit, credit and respectability which would even satisfy a man of naturally bad propensities, and

win him by his interest from the scenes of coarse degrading and expensive indulgence.

If such then, is the influence of agricultural knowledge upon ourselves, and upon the mass of every population, how important is it, to increase and diffuse the little stock we possess.—Then disregarding the trifling inconvenience and fatigue, we may incur, as members of an agricultural society, let us unite our efforts in the admirable task, of endeavouring to produce industry, plenty, virtue and health, within the sphere of our acquaintance, and to banish as far as we can, ignorance and indolence, the fruitful mothers of vice and poverty.

Can any reward in this world, be greater for such labours, than the certain consequence of an increase of sound knowledge in the business of our lives; that is, in the first place, bettering our own health and fortunes, and at the same time improving the condition of every human being, and not only them, but of every domestic animal around us? There is something so cheering and animating in the prospect of doing so much good, that I think it cannot fail to rouse us, to lay the foundation of an establishment, for the regular, constant and durable acquisition of agricultural knowledge: and the way to make every member feel an interest in the society, is, by making him feel his utility in consequence of his services.—Let a task therefore, of some useful kind, be imposed on each member, and to do this profitably, the concerns of the society, must embrace all our domestic and local concerns. It is useful to know the condition of every farm; its dimensions, its divisions, its arable and waste land, its produce in grain, in tobacco, in grass; its sources of manure of all kinds, the number and kind of stock, team carts, ploughs and labourers.—Let each member, furnish quarterly, statements of his own and adjoining farms, and if shame is felt in exposing our bad management, it is better to endure that pain, than the secret consequences of continuing in a miserable condition. It is certainly time that remedies should be applied to our modes of management, and all salutary remedies gives a little pain. The society will be found useful, also, in discovering and encouraging every useful man, whether he is a mechanic or a cultivator of land. This may benefit the members of society as well as the community. Committees to visit and report the condition and modes adopted by the best farmers among us, who do not belong to the society, will be another means of employing our members, and producing a general spirit of emulation. The intercourse of the society, may also facilitate the sale of males and females of the best breeds of cattle, horses and hogs, if the names of the owners are regularly reported. These are some of the personal advantages which may be derived from an association of this kind, as well as the general improvement of our cultivation.

Let us examine, what it is that gentlemen con-

template for themselves, when they determine to settle on or cultivate a country seat or farm.—Have they nothing in view but health, a calm retreat, amid rural shades and sylvan beauties? Then let the embellishment of their grounds and horticulture occupy their attention, and thereby, let them diffuse taste and useful elegance, to supply the place of comfortless waste and idle profusion. Do their pecuniary disbursements call for speedy supplies, then their objects should be to select the crops that produce most in market, and to draw the greatest product from the soil, in the condition in which they find it, of which it is capable of being made to yield, with the force of team and hands, which their means will enable them to keep, without entirely destroying future prospects of crops from their land. For these, the system of cultivation recommended by Arator, for corn and wheat, and the modes pursued by the most industrious and intelligent planters of tobacco, appear to me, the best that have ever yet been realized. Let this class of men also, keep no more expensive animals, than are profitably employed, and fatten only that kind of stock, which can be kept cheapest, and sells dearest and most readily. On the other hand, if their pecuniary circumstances, do not call for large or immediate supplies, it appears to me, that this severe mode of cultivation, is not ultimately so profitable, particularly to persons who occupy lands a good deal exhausted, as that system, the object of which, is not to obtain the greatest amount of disposable cash, but merely to produce enough to supply the frugal wants of their families and servants, and to maintain the working animals and utensils in good condition. While the labour, which can be spared by thus making crops, which require less time in the cultivation, is diligently and judiciously employed in manuring, draining, and every other way of improving, that can be devised. The land of the farmer is his capital, and say it yields only five bushels of wheat on an average, throughout the farm, to the acre, and wheat yields one dollar a bushel, and the expense of making the wheat, is one third, that is, 33 1-3 cents, in the bushel; the profit per acre, is then \$3,33 1-3, and on a hundred acres of this kind, in cultivation, \$333,33 1-3; and we will say, such land can be bought or sold for 10 dollars an acre.

The question then, for our consideration, who are (at least some of us, and many throughout the county) possessors of this kind of soil, is, how to increase our capital, or our means of obtaining income; that is, how to make the greatest profit on this kind of land, or on the amount of it we hold. One hundred acres of it, now yields \$333,33 1-3 clear of expense of cultivation, and will sell for only one thousand dollars. Increase the expense of cultivation, by reducing the proceeds to \$233,33 1-3, that is, apply one hundred dollars worth of the time and labour expended by your hands and team, in cultivating the above

crop, to manuring, ploughing and draining, and I think that a hundred dollars worth of time and labour, not money, thus applied, will give a greater profit than we could possibly obtain, by applying the same value of time and labour to making corn, wheat or tobacco. From an experiment that was made in my neighbourhood, it was ascertained with tolerable accuracy, that a two ox cart load of earth, leaves and trash, scraped from the woods, mixed with about one third part scrapings from a cow yard, gave an increase of one peck of wheat to the cart load; this at one dollar the bushel for wheat, makes the cart load worth 25 cents; and I have proved, as I will take another opportunity of showing, that a cart and two hands, can at short distances, say three hundred yards, make twenty-one loads per day; making the profit of the labour of an ox cart and two hands equal to \$5.25 per day, and for 300 days, or one year of working days, \$1625. Now if the 100 acres, giving annually \$333.33 profit, will sell and is worth at the market price, \$1000, can be made to give \$1625 per annum, it would sell taking the rate of annual profit, for the rate of value, at nearly \$5000.

The income that can be made from a tract of land, ought surely to govern the price, and will always do it in an industrious and thriving agricultural section of country. Though that is not the case altogether in this county, and for the sole reason, that we are not as industrious and thriving as our abilities and the capability and original fertility of the soil will admit.

This therefore, appears to me a view of the application of time and labour, more advantageous and profitable to holders of impoverished land, than any system, however excellent, of applying labour to the cultivation of the most profitable crops. In a system of farming, both modes of applying labour, are all important, but the labour applied to manuring, ploughing and improving, gives in the truly rapid increase it makes in the value of the land, greater increase, or funds, or productive capital, than any amount of dollars that could be made by the best possible application of labour, to tilling and working plants of any kind in its present condition. When land is thus made rich, we all know that the labour of working it is reduced very considerably. The most rapid fortune I ever knew to be made, on land that was poor when it was bought, was by a man named George Castor, he was a labouring man, who had amassed money enough to purchase 50 or 60 acres of land, and to retain in hand over and above the purchase, 4000 dollars. He moved his family on this land, and for two years diligently devoted his whole time to manuring and improving, and expended all his surplus 4000 dollars, in this way, and not till the third year after he had moved on the land, did he attempt to make a crop. When his land was thus made capable of producing, and worth the labour of cultivation, he commenced making crops, and succeeded to make money fast and to become wealthy.

Farmers, who have not like him, surplus money to begin with, and to maintain their families while putting it in a condition fit for cultivation, may, many of them at least, spare some time and labour from the crop necessary to the maintenance of their families; and it appears to me, that no business of profit, that ever was pursued

by men, is so profitable as labour, applied to manuring. If commerce, which yields 10 or 12 per cent. per annum, on capital, can afford to pay 6 per cent. to banks for the loan of money, manuring, which certainly yields at least 2 or 300 per cent. per annum, where we have not to buy the manure, and at least 50 per cent. where we have to pay for it, may also afford it. It is because it is too easy for a farmer to live somehow and keep free from debt, that farmers have been long in the habit of not calculating the best modes of applying time and labour. What other business or trade, mercantile or mechanical, pursued so carelessly and with so little correct calculation as farming is every where carried on, would fail to make men bankrupts, and utterly ruin them. Merchants are every day becoming bankrupt, with all the keenness and attention which they give to their business, while farmers, hardly, ever fail totally, in the worst of times, with infinitely less attention to their interests.

Does not this show, what are the resources of land? The management of land, is yet certainly not well understood; but it appears to me, that money judiciously applied to land and cultivation, may be made to yield a greater profit, than in any other way of employing it, usual among men, particularly where land is as cheap as it is among us. We can buy it from 10 to 30 dollars per acre, and such will yield from 5 to 15 bushels per acre, and deducting 1-3 for the expense of cultivation, it yields from 3 1-3 to 10 dollars per acre, when cultivated. To the 10 dollar land, apply 25 dollars worth of labour and manure, to each acre. At the very cheap rates that manure and labour can be obtained here, say for a man 60 dollars per annum, and 20 dollars for a woman or boy, that is one sixth of a man's yearly labour, or two months labour, on one acre of one man. In two months, one man could cover an acre with manure, with no other implements than a spade, and a wheel-barrow; I choose this most difficult and expensive mode, for the sake of example. A cover, one inch thick of manure, would at this rate, cost 10 dollars hire, and 10 more for maintenance, making for the spade, wheel-barrow and all, 25 dollars. This cover of one inch thick, would make this 10 dollar land, yield the next year at least 25 bushels of wheat, or 1000 wt. of tobacco, that is, in wheat 25 dollars, in tobacco, 80 dollars; deduct the third for cultivation, gives profit 17 dollars 2-3 for wheat, or 53 1-3 profit in tobacco. With this tedious mode of improving it, this land would now only cost 35 dollars the acre, and in one year after paying for the land, the owner would have a surplus of 18 1-3 dollars, that is, more than 150 per cent. profit in income, and 250 per cent. profit in the increased value of the land, in all 400 per cent. I am not, you all must perceive, when you reflect, speaking of impossibilities, but of what you know can be done. and I have stated the mode of manuring in the most difficult and expensive way, and not in the usual way with carts, and yet the profit of manuring, is such as you see it. To apply manure in the cheapest mode, that many of us have it in our power to do, it is profitable, (if there is any truth in arithmetic,) in a degree that infinitely surpasses any other useful occupation. Therefore, gentlemen, it is self evident to me, that there is no more profitable business followed by

men, than farming is, if industriously and judiciously followed. It remains only for us to gather the best experience, and to make the best use of it to improve rapidly our condition and consideration in the eyes of the world.

FROM THE ALBANY ARGUS.

Treatise on Agriculture.

SECTION VI.

Of Manures—their management and application.

The principal of fertility, (the result of animal and vegetable decomposition,) is, as we have seen, susceptible of solution, and in this form becomes the aliment of that artificial vegetation, which is the work of man, and which leaves so little on the earth, to compensate for the great deal it takes from it. In a course of years, therefore, there will be an actual loss or subtraction of matter, useful or necessary to the growth of plants, which can only be re-established by manures of vegetable or animal origin. The most approved methods of preserving and applying these must therefore be among the objects most important to the agriculturist; and that the reader may better understand the reasons of the practice we mean to recommend, we begin the discussion with Kirwan's analysis of stable manures.*

	Charcoal,	Lime.	Clay	Sand,	Fixed Salts.	Carbonated hyd.	Carb. acid & water.
105 lbs. of							
Cow Dung,	3.75	1.20	0.15	2.4	0.6	92.30	
Horse Dung,	10.2	1.50	0.50	3.0	0.21	89.77	
Sheep Dung,	25.0	10.28	29.0	29.0	0.72	68.00	

The elementary parts of this manure, as exhibited in this table, sufficiently indicate the mode of preserving them. When dropped in the field and in small parcels, by cattle, they exhibit no signs of fermentation, nor undergo, in that state, any degree of chemical decomposition; but when brought together and frequently wetted and subjected to the action of atmospheric air, they are speedily dissolved and give out much gaseous matter. To prevent the escape of these soluble and volatile parts, two things are necessary: 1st, that the dung be collected in a reservoir, of convenient size, walled and paved with stones: and 2d, that a layer of sand, or earth, be occasionally spread over the surface of the dung. The former will prevent filtration, and the latter retain the gaseous matter, so useful in vegetation, and at the same time augment the quantity

* Tull and Du Hamel's doctrine, that frequent ploughings and sowings superseded the necessity of manure, is no longer held by any well instructed agriculturist. The maxim of Oliver de Serris is much better founded. "Le bien labourer, le bien fumer, est tout le secret de l'agriculture." Till well and manure well is the whole secret of agriculture.

of manure. To prevent an excess of moisture, which always retards, and sometimes obstructs decomposition altogether, the reservoir should be covered.

The application of manures, is a subject of more difficulty, and has given occasion to some dispute. The controverted points are :

1st. Whether short, or long dung, or in other words, whether dung thoroughly rotted, or that which has but began to rot, is most advantageous ?

2d. Whether dung used superficially, or ploughed deep into the ground, is most profitable ?

3d. Whether extraneous matters admitted into the stercorary, are useful or otherwise ?

4th. Whether stable manures are best applied directly or indirectly to wheat crops ?

5th. At what time manures are best applied ?

6th. In what quantity ?

We shall discuss these points, separately and briefly—and,

1st. Which is to be preferred, long or short dung ?

The discordance in practice, as well as in opinion, prevailing on this question, induced some scientific men to institute a series of experiments : having for object a full and regular solution of it. With this view, parcels of dung (long and short) were taken from the same stables, on the same day, and applied to crops of the same kind, growing on the same fields. The result was perfectly conformed to theory and similar in all the experiments. Those parts of the field, to which the short dung was applied, gave the best crops the first year, but those on which the long dung had been laid, gave the best crops the second and third years ; a fact which authorizes the conclusion, that if we wish to obtain one great crop, the rotted dung is best ; but when we look to more permanent improvement, the long dung is to be preferred.

2d. Which is the better practice, to spread manure on the surface, or lay it deeply under the ground ?

In favour of the former practice, it has been contended that the distribution of the dung, could more equally be made on the surface, with a spade than under ground, with a plough ;* and for the latter, that all tap-rooted plants, entering far into the earth, required it to be laid deep, and that those of fibrous roots, would be sufficiently benefited by its exhalations. Both modes, however, are obviously bad. We have seen, in the preceding article, that dung to become the aliment of plants, must undergo a decomposition, and that to the production of this, the combined action of air and water is indispensable. But if the manure be buried deeply, this action cannot reach it, and the dung remains a caput mortuum. On the other hand, if spread superficially, the rains dissolve and carry away many of its juices, while the sun and wind eva-

porate the rest. These considerations lead to the true rule, on this head, which is, to lay it three or four inches below the surface of the soil. At this depth, (if short dung) its action will be most vigorous in all directions, and if long dung, a greater depth will, as already suggested, completely destroy all action.

3d. Are extraneous matters, as horns, hoofs, bones, shells, feathers, leaves, weeds, &c. &c. to be admitted into the dung heap ?

There is perhaps nothing in either theory or practice, so obviously right, that may not be disputed. The objection made to these matters, in mass, is, that they do not decompose equally, and that those ingredients of the heap, which are slowest in decomposition, retard others, which, if left to themselves, would, in this process, be more forward. This objection is without weight ; for we have seen, that long, or unrotted manure, though its effect be less prompt, is, upon the whole, more favourable to culture, than that which is rotted. The difference of time in decomposition, is therefore no evil, and the augmentation of the mass, is a great good ; beside that some of these offals are the most powerful manures. Horns and hoofs are compounded of albumen and gelatine ; bones, of the phosphate and carbonate of lime and gelatine ; shells, of carbonate of lime and animal matter, and feathers and hair of albumen oil, &c. &c. Applied to the roots, they forward the growth of fruit trees more than any other species of manure.

4th. Whether the stable manures are best applied, directly or indirectly, to wheat crops ?

The practice, on this head is different in different places. In France, as in all other countries, where fallows are in use, the dung is applied directly to the wheat crop ; while in England, where the rotation system is established, it is applied to the summer crop, which immediately precedes that of the wheat.

The objection to the French practice is, that the weeds brought into the field by manure, start with the grain, and do as much harm as the dung does good. Nor is there any sufficient answer, that I know of, to this objection. The English practice is, therefore, much to be preferred ; because, besides the advantage of exchanging a fallow, for a summer crop, it permits you, while that crop is growing, to destroy the weeds that otherwise would have infested your fields.

5th. At what time of the year are manures best applied ?

The most approved rule, on this head, is to apply the winter dung wholly to potatoes, flax and corn ; that of the spring, to cabbages and beans, and what may be afterward collected, to turnips ; and,

6th. In what quantity ought we to apply them ?

The quantum of manure applied to the acre, must necessarily depend upon the staple of the soil. If entirely exhausted of vegetable mould, a great deal will not be too much ; but there is a possibility of erring, in this respect, even with regard to poor soils. Where an excess of manure exists, the crop (whatever it be) runs into stock and leaf, and the effect on the flavour of the vegetable, is bad ; a fact, which the experience of all who have tasted the cabbages and turnips raised in the *faudrette* of Paris and Lon-

don, can abundantly establish. Even meadows (which are least liable to injury in this way) may be too much dunged. What cultivator of observation, has not seen his cattle turn with disgust from herbage, the most luxuriant in appearance, but growing out of masses of manure ? This circumstance suggests the advantage of going over our meadows in the fall and break up and distributing such lumps of dung as may be found in them.

Extracts from a Compendious Dictionary of the Veterinary Art.

(Continued from No. 23—p. 183.)

Age of Cattle. The age of neat cattle is known by their horns. Till the third year of their age is sufficiently indicated by their general appearance, they then change their horns for a permanent pair ; these have a kind of button or circular protuberance of horn at the end next the head ; the following year the button is impelled forward by the new shoot of horn, which has a button next the head like the former. The same process takes place annually during the animal's life. These protuberances take the form of a ring round the horn, which is easily distinguished, and by which the age is known ; counting three years for the point of the horn, and one for each ring.

Age of Sheep, is known by their teeth. In their second year they have two broad teeth before ; in their third year they have four ; in the fourth, six ; and in the fifth, eight. After this period the age cannot be accurately known by the teeth. The age is indicated also by their horns, which are not changed as in the cow, but have an additional ring every year ; only one year is to be counted for the point of the horn. The age of the goat is known in the same way, and that of deer by an additional branch appearing every year in the palm of their antlers, or horns.

Anbury, or Ambury. A soft spongy tumour, sometimes met with in horses and cows. They are of various sizes, sometimes less than a mulberry, which they often resemble in colour ; at others, as large as an apple of the middle size. They generally appear about the nose, but are found sometimes in other parts of the body. When wounded they bleed freely ; therefore farriers generally attempt the cure by some escharotic application. The following has often proved successful :

Powdered alum, two ounces.

Water, one pint.

Sulphuric acid, one dram—Mix.

When they are small and numerous, or if they have a wide base, this application may be safely used, particularly when professional assistance cannot be procured. If the tumour should be attached to the body by a slender neck, it may be cut off with perfect safety ; and if there should be occasion to stop their bleeding artificially, a circumstance I have never known, the red-hot iron may be applied for this purpose. After the anbury has been removed, the part should be touched with lunar caustic for three or four days, to prevent the tumour from growing again.

Antidote. Medicines that prevent or remove the affects of poison ; when a horse has been ma-

* The English (are said) to have a machine attached to the drill, that goes before and distributes the manure at the necessary depth. In planting potatoes, we make a bed of dung for the plant. Why not apply the same reasoning and the same practice to all seeding of the ground ?

liciously poisoned by arsenic, or corrosive sublimate, a solution of soap in some mucilaginous fluid, such as infusion of linseed, should be given freely; oil and salt of tartar have been recommended also, and the liver of sulphur (sulphuret of potash.) The poison generally employed to destroy dogs is nux vomica; when a dog has been seen to swallow this poison, an emetic given soon after will effectually prevent any ill consequence. I have known it succeed even after the convulsions, which nux vomica occasions, had commenced. Emetic tartar, turpeth mineral, or salt, are more certain in their effect than other preparations, and should be given in rather larger doses than are usually employed.

Antimony. A medicine much used in farriery; it is variously prepared, and though some of the preparations formerly employed are now thought by many veterinary practitioners unnecessary, and I am inclined to believe they are so, the following account of them may not be uninteresting:

Antimony or Sulphuret of Antimony. A black shining mineral, composed of sulphur and a peculiar metal, which by a chemical process, may be separated from it. When finely powdered or levigated it is considered a good alterative medicine, and is commonly employed in the diseases named Surfeit and Hidebound. It is often given merely with a view to improve the horse's appearance, that is, to give him a fine glossy coat; it is generally recommended also for those diseases of the skin which cause a horse to rub himself against the stall, &c. Sulphuret of antimony is certainly an innocent medicine in the horse, but its efficacy has been doubted on account of its apparent inertness. The common dose is about an ounce; it may be given, however, in larger doses with safety. See *Rees' Cyclopaedia* art. *Antimony*.

Precipitated Sulphur of Antimony, or Golden Sulphur of Antimony. This preparation has been found useful in obstinate diseases of the skin when joined with a small proportion of calomel. The dose from one to two drams, with about a scruple of calomel.

Antiseptics. Medicines which prevent or correct putridity. Peruvian bark, opium, prepared ammonia, yest, and wine, are said to possess this property; and, as an external application, the fomenting poultice has been strongly recommended. See *Poultice, Mortification and Fever*.

Antispasmodics. Medicines which are designed to cure those diseases which depend upon spasmodic or convulsive action of any part of the body, as in locked jaw. Opium, ether, and camphor are considered as the most powerful medicines of this class.

Apoplexy. According to Gibson, the following are the symptoms of this disease: "In apoplexy, the horse drops down suddenly without sense or motion, only a working of his flanks; the previous symptoms are drowsiness, watery eyes, somewhat full and inflamed, a disposition to reel, feebleness, a bad appetite, and almost a continual hanging of the head or resting it in his manger; sometimes with little or no fever, and scarcely any alteration in the dung or urine." His method of treating it consists in bleeding plentifully, and keeping the horse for sometime to an opening diet of scalded bran, and sometimes scalded barley, lessening the quantity of

his hay. After two days the bleeding is to be repeated, but in a smaller measure; if the horse has a cold, it will be proper to give him pectorals, such as are prescribed for colds; but if no symptoms of a cold appear, it will be necessary after bleeding and a spare diet, to give him two or three aloetic purges.

Apoplexy seems to depend either upon too much blood being sent to the brain, or upon a rupture of a blood vessel in that organ; bleeding therefore is the essential remedy; to prevent a return of the fit, purging medicines, with an opening and spare diet, are certainly proper; but I think the "scalded barley" may well be dispensed with. Setons or rowels should be placed about the head, or the whole of the forehead blistered. The most effectual mode of bleeding in this disease is to open one or both of the temporal arteries: but where this cannot be done, both of the neck veins should be opened that a large quantity of blood may be taken off in a short time. It is necessary to distinguish apoplexy from lethargy, or sleepy staggers (see *Lethargy*.) because that disease requires a different treatment. There are other fits to which horses are subject, that may appear to be a slighter degree of apoplexy than that described by Gibson; but as their treatment is in some respects different from that of apoplexy, they will be described under the following heads: *Dropsy of the Brain, Epilepsy, Vertigo, Staggers*.

Appetite. Want or loss of appetite may arise either from fatigue, from what is termed fever in the horse, or from a diseased state of the digestive organs. If it depend on the former cause, give a cordial ball; and if the subject be old, or accustomed to take cordials, give it as a drink, mixed with ale.

Loss of appetite, depending on fever, or general indisposition, commonly requires bleeding and laxative medicines; but if it is caused by worms, or a diseased state of the stomach or bowels, a mild mercurial purgative is most proper, unless the disease be of an inflammatory nature.

Horses sometimes fall off in condition, not so much from want of appetite, as from pain and difficulty, either in masticating their food or swallowing it; the method of distinguishing and treating such cases may be seen under the heads *Mouth, Teeth, Diseases of, and Sore Throat*.

Should the horse continue off his appetite after the operation of the purgative, tonic medicines may be given (see *Tonics*). Loss of appetite accompanied with langour and general debility, often happens at the time of moulting or changing their coats, in such cases both bleeding and purging are improper, but tonic medicines will generally be beneficial.

Appetite, Craving, may justly be considered a disease, and one of importance too; for unless restrained, it often causes incurable cough, roaring, broken wind, and other diseases. Horses that have the excessive appetite will eat even their litter when limited in hay; the only effectual restraint, therefore, is a muzzle, which should be worn constantly, except when he is feeding. The corn should be mixed with a large proportion of clover chaff, and only a small quantity of hay allowed; his allowance of water also should be very moderate. A purgative is the only medicine likely to be of service.

ARSENIC. A poisonous mineral, sometimes used in veterinary medicine, both internally and externally. Though arsenic has been given to glandered horses in the immense dose of two drams, in many instances without any violent effect; it has sometimes, in much smaller doses, irritated the stomach and bowels in a considerable degree; and in one case, where it was continued by mistake, after that effect had been produced, the horse was destroyed by it, much caution, therefore, is required, when arsenic is employed. It is proper to begin with small doses, about ten grains, increasing them gradually, and carefully watching the effect. Whenever it appears to diminish the appetite, or cause uneasiness in the stomach and bowels, no more should be given until such effect shall have ceased. Arsenic should not be given when the stomach is empty; a thin bran mash first may be given to the horse. Arsenic has been considered as a powerful tonic, and has been often employed in glanders and farcy; it has also been given in cases of general debility. (See *Appetite, Glanders and Farcy*.) Arsenic is sometimes employed as an external application in several diseases; but in these also it should be used with caution, and generally requires to be diluted or mixed with other drugs. To dissolve arsenic, it should be boiled in water, with an equal quantity of carbonate of potash; in this state it is said to be less dangerous. See *Mange, Scab, Cancer, Quittor, and Spavin-bone*.

[To be continued]

CURE FOR A WEN.—(An Indian prescription.)

First, take a pound of new butter, without salt, lay it in a coal oven; get a bullfrog, without hurting it, (says the Indian,) the frog must be alive:—lay the frog with the back down in the butter; bake the frog until it is well done; take it out, pour off the butter in a vessel, and anoint the wen as often as you please in the course of the day—This cure has been tried on a wen that had been growing for 30 years, and had become quite painful, attended with an itching. It ceased the first day this was tried, and sunk very soon. In eight or nine months the body of the wen was squeezed out, without pain. The patient thinks it would have come out much sooner, but she neglected it, as it did not hurt. The application produced a curious sensation, as if it was searching to the roots. Any person thus affected, need not hesitate to try the experiment as it is very simple.—*Rich. Com.*

Instructions for Practical Naturalists.

* In number 18, page 141, under the head *Hints to American Tourists in foreign Countries*, we copied instructions for the preservation and transportation from one country to another, of seed and plants; we have now the pleasure to add what may prove useful hints to the American Traveller and Zoologist, who desire to study the history and to preserve specimens of individuals in the animal kingdom.

On procuring an animal with which we are unacquainted, the first point to which our attention should be turned, is to ascertain whether it is convertible into food, clothing, or is otherwise applicable to the uses of man; whether its skin is of such a nature, as to be serviceable in trade or commerce; whether it possesses glands for the secretion of musk, or other unctuous matter; whether from its size or nature it is likely to be

reducible to agricultural purposes, and most particularly to what purposes, (if any,) and by what means it is rendered subservient to the uses or comforts of the inhabitants of that country where it is a native; or should its habits be detrimental or obnoxious, what measures are pursued to destroy the species, or to avert its mischiefs.

Endeavours should be used to ascertain the food generally consumed by each particular kind, its time of gestation, the number of young it produces at a birth; at what age it arrives at full growth; the differences in appearance in the different sexes; whether as it advances in age, any particular change takes place in its general appearance, either by attaining horns, tusks, &c. &c. By attending to particulars of this kind, the practical naturalist will not only obtain a mass of information amusing and instructive to himself as a philosopher, but most probably of very considerable importance to the community at large; and this he may render entertaining in the highest degree, by giving correct accounts of the modes pursued in different countries, to obtain the various kinds of animals either for food, raiment, or amusement; the plans adopted to reduce the wild animals to a state of domestication, and by stating whether, when so domesticated they continue to propagate; and what species are in general request either for domestic purposes or exportation.

It is obvious that inquiries of this kind cannot fail of ultimately producing general good, as by becoming acquainted with the wants and products of distant countries, the attention of our merchants and manufacturers, will be naturally turned to the supplying those wants, and by the exchanging the manufactures of this country for the natural productions of others, reciprocal advantages must accrue.

To facilitate the inquiries of succeeding naturalists, as well as to afford an opportunity of examination to the man of science, many plans have been at various times adopted, with a view to preserve the skins of animals, and to exhibit them in their natural forms, for which purpose the mode we have practised with the greatest success, we shall now proceed to detail.

Having obtained any quadruped which we are anxious to preserve, we take its measurement, as by so doing, we are the better enabled to judge of its proportions when exhibited in a cabinet. The length of the animal from the nose to the insertion of the tail, the length of the tail; the height at the shoulders and hips; the girth at the neck, breast, and loins, and any remarkable appearance in the structure of any of its parts, should all be carefully noted.

In drawing or describing any quadruped, the following particulars should be observed. The number, form, disposition or absence of the teeth, horns and claws; if the latter are retractile as in the cat tribe; the form of the feet or hoofs, whether the animal be covered with wool, hair, spines or scales; does it possess any name; the form of its ears and tail, if the latter be prehensile, or is capable of being used as an auxiliary in seizing any object, or to assist in escaping from any danger; if the posteriors are bare or callous, and if the animal is capable of distending its

cheeks, so as to form pouches, as in many of the Monkey tribe; or if possessed of abdominal pouches for the securing of their young, as in many quadrupeds of New Holland; the colour of the eyes should be noticed the instant the animal is obtained, as almost immediately after death it is subject to change.

When the foregoing remarks have been made, the next object is to skin the animal; and as the value and appearance of a cabinet of quadrupeds depends entirely on the perfect state of the skins, too much pains cannot be bestowed in the operation, which should not be commenced till some hours after the subject is dead; as in that time the blood will have coagulated, and there will be less danger of soiling the skin.

The animal should be opened down the middle of the belly, and the skin stripped back to the knee and elbow joints, which should be left with the skin, care being taken to remove all the flesh and integuments from the bones; the skin may then be drawn over the neck and head; the body is to be separated from the head at the first joint; the surface of the skull must then be thoroughly cleared of all flesh; the eyes, brain, tongue and flesh in the interior of the mouth, must be taken away, and freed from all loose skin, or integuments, that may be attached; when this is effected, the skin may be returned to its proper position; and the cheeks must be filled out with cotton or other soft substance, mixed, with a considerable quantity of antiseptic powder, composed of one third of white oxide of arsenic, and two thirds of powdered burnt allum; this powder should be rubbed in the inside of the mouth, and all the cavities of the head, as the eyes, ears, and nostrils, should be filled with pledgets of cotton, dipped first in a strong solution of corrosive sublimate of arsenic, and a quantity of the powder strewed into each place.

The inside of the skin, and the leg bones, when quite clean from all loose skin, &c. should be rubbed well with the powder, this rubbing should be repeated occasionally until the skin acquires a considerable degree of dryness; if the animal be large the leg-bones cannot be conveniently retained attached to the skin, but in all cases where it is practicable, considerable advantages will accrue from their preservation, — this last remark applies also to the skulls of the larger quadrupeds, which should in all possible instances be preserved, whether attached to the skin or not. Of such animals as possess soft or spongy feet, the soles may be opened, and all the fat and muscular parts removed; after which, the powder should be applied plentifully; and before the skin becomes hard or dry, the cavities of the feet should be filled with cotton as directed for the head, and the incisions sewed neatly up.

When the skin is thoroughly dry, it should be so packed as [if possible,] to exclude insects; the drying should be performed in the shade, and the utmost vigilance is necessary in observing that no skin be packed till it is perfectly so: and to assist in drying, the skins should be kept distended, and exposed to the air. In skinning those animals that are furnished with abdominal pouches, it would be better to open them longitudinally on one side, otherwise this curious character will be destroyed; and in all animals possessing glands for the secretion of musk or

odour, these organs should be carefully preserved.

As a collection of skins necessarily occupies much time in procuring, to preserve them free from injury when obtained, is an object of the first importance. In order to succeed in this, two principal causes of injury must be carefully guarded against—*Damp*, and the attacks of *Insects*; the former we generally have it in our power to avoid, but the latter assail collections of this kind in so many ways, and under such varied circumstances, that the collector must be ever on his guard; since it very often happens that the very means used to destroy one kind of insect, calls into existence myriads of others equally destructive. As a general plan, we have succeeded best by exposing from time, to time dry skins to the action of heat, which by repetition though it may fade their colours, in a slight degree, has the great advantage of eventually destroying all insects.

When a box is filled with skins, or rather when a box full is obtained, if circumstances will permit, the skins should be loosely placed in a large case with a glazed front, having all the seams or joints carefully stopped, by pasting strips of paper over them; in this state the case should be gradually brought before a large fire, where it may remain six or eight hours; by having a glass front, if any insects, particularly of the *moth* kind, are amongst the skins, the heat will soon cause them to flutter about, and they can easily be perceived when dead. But lest any of the insects so destroyed, should have deposited their eggs on the skins, the frequent repetition of this plan is desirable, previous to the skins being finally packed.

When about to be packed, each skin should be wrapped in a separate paper, (the common brown paper is to be preferred in all cases, as it resists damp more than any other kinds, and is less liable to be devoured by insects) with a memorandum of what particulars belong to it, as the having a duplicate of this kind, though it may trespass somewhat on the time of the traveller, will not unfrequently amply repay him for his trouble. The skins should be packed as close as possible, and when the package is full, the joints and cracks should be stopped with pieces of paper pasted over them, but even in this, some caution is necessary, as paste affords a nidus to numerous insects, which frequently deposit their eggs on it, as a proper food for the larvæ when hatched. To prevent any unpleasant effects of this kind, a considerable portion of corrosive sublimate or arsenic should be mixed with the paste before it is used: and when the paste is thoroughly dry, the places so covered should be washed over with a strong size, in which arsenic or sublimate is held in solution; the size may be formed of pieces of skin boiled in water, until completely dissolved, and the arsenic or sublimate should be mixed with it whilst hot. If previous to being put on ship-board, the cases should be covered over with a thick coat of oil paint, it would most effectually exclude both damp and insects. With these precautions, we have known skins of the most delicate species of quadrupeds and birds, remain packed for three or more years, even in warm countries, without receiving any perceptible injury.

When a box of skins shall be re-opened, the skins should be exposed to the fire as before directed, after which they will be in a fit state to put up. This part of the undertaking is attended with a considerable portion of trouble, and to succeed well requires no small degree of ingenuity. We recommend every person desirous of attaining perfection in this art, to have a lesson or two from some skilful practitioner, as it is not an easy matter to succeed in a task of this kind from any instruction, without the assistance of practical illustration.

The best mode to pursue in setting up the smaller kinds of quadrupeds, is, by forming a false body; this may be done with a piece of iron wire, of a substance proportioned to the size of the animal, and should be of sufficient length to pass through the skull (if retained) and to protrude a little, and also to extend rather beyond the tail; the ends of the wire should be filed to sharp points, to prevent their tearing the skin; and it should have previously been thoroughly heated in the fire, to render it quite flexible: this is to be wrapped round with tow or fine rope-yarn, till it is sufficiently large to fill out the skin; lateral pieces of wire should be introduced through the soles of the feet, and when practicable through the leg-bones, and attached to the principal wire running through the body; every part of the skin should be filled out to its full extent; and some of the powder should from time to time be introduced with the stuffing. The leg-wires must be sufficiently long to pass through the soles of the feet, and through a piece of wood capable of supporting the animal, to which it may be fixed, as it can then more easily be dried. Previously to the skin being stuffed, if a dried one, it will be necessary to wrap it in damp cloths for twenty-four hours or even longer, according to the size and substance of the skin: some of the largest quadrupeds will even require thoroughly soaking in water for some days; animals of the size of the horse, ox, rhinoceros, &c. will be most faithfully represented by having their skin supported by a frame of wood, which will give them stability; otherwise, from their weight, they are liable to get out of shape; but as it is hardly probable that the stuffing of this description of animals will be attempted by any but a professor, we consider further remark on this point unnecessary.

When the skin is filled out to its extent, it is to be carefully sowed up with strong double silk; the needle should be a curved triangular one, such as is used by surgeons, the fur may then be smoothed over the seam, which will hardly be perceptible. The animal should be placed in as easy and natural a position as possible, at the same time recollecting that natural effect ought not to give place to elegance of form. Before the skin is quite dried, the eyes should be inserted, and to enable the operator to represent the animal with eyes of their natural colour, it is desirable to have as correct a representation of them as possible; glass eyes of all sizes and tints are to be procured at the glass bead makers, in London: they should have a piece of wire attached to them, by means of which they may be securely fastened; and to give them a natural appearance, they should be somewhat larger than the natural eye, and the eye-lids must be carefully brought forward so as completely to include,

and which will reduce them in appearance to the natural size.

The next business is to dry the stuffed skin, which may be best done in a shady room, into which the air is freely admitted; in a week or more, according to the bulk of the subject and the state of the atmosphere, the skin will be dry: but to dislodge any remains of moisture, it may be brought within the influence of a fire, but by no means close; after which it should be placed in a glass case, with the seams and joints closely pasted up; and lest any insects should be attached to the skin, it will be better that the case be baked in the manner already directed, relating to the packing the skins. The skins of animals that are in a recent state, should be treated in all respects as the foregoing, excepting that the skins should not be filled out to the full extent, as in drying the skin is liable to shrink: fresh skins will also require much more of the antiseptic powder to be used when stuffing, as it absorbs the grease contained in the skin; and they will require longer time in drying, before they are in a fit state to place in cases. The wires that pass through the legs should be brought through the bottom of the case and there turned, by which the skin will be kept in an erect posture, and to prevent its weight inclining the animal forwards, a piece of wire may be introduced through the back of the case and attached to the body, which will effectually prevent its moving, at any time the case may require to be taken down. As a pleasing relief and to ornament the inside of the bottom of the case, a quantity of dried moss, finely powdered and mixed with a little coarse sand, may be sifted over it, first moistening the ground with thin carpenter's glue; the ground may be further enlivened by introducing sprigs of moss or dried grasses.

To persons visiting foreign parts for the purpose of pursuing this study on a more extended field, we take leave to remark, that in all cases where it is practicable, the skins of both sexes in the adult state are particularly desirable, as also that of a young, when any remarkable difference is apparent, as for instance, the skin of *Felis concolor*, the Puma or American lion, is, (as its specific name imports) of one uniform colour, whilst in its infancy it is spotted, afterwards the spots appear oblong, almost stripes, and when it attains its full growth, they entirely disappear.

As it may be more convenient, at the time of procuring many of the smaller species of quadrupeds to preserve them entire, till a more convenient opportunity offers for stuffing them, they may be safely put into glass or earthen jars, or small casks filled with one third spirit of wine, arrack, rum, or other spirit, and two thirds of a strong solution of burnt alum; care should be taken not to use, if avoidable, coloured spirit of any kind, as it frequently happens that when coloured, it will leave a stain on the lighter part of the skin or fur, that cannot be removed. The solution of alum should be made by pouring one quart of boiling water on eight ounces of alum, and when cool, the water should be poured off, as some water will not hold that quantity in solution; and if a larger quantity be dissolved at any one time than is required, the water may be evaporated either over a fire, or by placing the solution within the influence of the sun, and the alum will be deposited in crystals, which only require

being burnt over a common fire to be fit for using again. The preserving in spirits has this decided advantage, that at any subsequent period the animal will be seen with all its parts perfect, and may offer interesting amusement at a more leisure moment, than often falls to the lot of collectors whilst absent from home.

To succeed in the different operations already enumerated, the traveller must be supplied with the necessary instruments, and these in duplicate; such as *Dissecting Knives*, *Scissors*, *Forceps* of different shapes and sizes; and what we have found particularly useful, is an instrument known to hard-waremen by the name of *Budding Knife*, and for which purpose it is in general use by gardeners;—the blade should be long and thin, and the handle thin, flat, and rounded at the edges; besides these, *Pliers* of different sizes and forms, as round, flat, and cutting are indispensable; *Needles* of various sorts, as surgeon's curved and flat needles; straight triangular needles, such as are used by gloves; and the common kinds in variety. The latter, besides being useful to the traveller himself, may prove a most valuable present in distant countries, where the intercourse with Europe is but trifling or accidental. *Strong Thread* and *Silk* should not be omitted; but the latter is always to be used in sewing up skins. Various kinds of *Paper* should likewise form part of the traveller's investment, and particularly coarse brown paper, as it is of more common request and possesses many advantages over the other kinds.

In the foregoing instructions the author has endeavoured to avoid all unnecessary expense and trouble; the *antiseptic* he recommends, possesses all the requisites, and though simple, he feels confident it will be found equally efficacious with any of the most expensive preparations of the kind; but as it may not at all times be obtainable, any of the following articles may be used with a probability of success.

Ground or whole pepper and most kinds of spices, avoiding those of an oily nature; ground tobacco; corrosive sublimate; sulphur, musk, burnt alum, (which may be prepared by burning common alum over a fire till it loses its transparency;) camphor; and the mere enveloping a skin in common brown paper that has been saturated with allum and arsenic in solution, has also been successfully tried.

As each practitioner has a method peculiarly his own, in performing the operations of skinning and stuffing animals, the author does not presume to say his is the best; but if simplicity joined to economy are worth attending to, his plan at least has these to recommend it.

To facilitate naturalists in making their remarks on any animal they may procure, a sketch of a table is annexed, which we would recommend to every person attending to Natural History, to have constantly in their pocket book; or at least some one on a similar plan; which may be procured at most booksellers or stationers, ruled to their own pattern; by having tables of this kind always at hand, opportunity is afforded of immediately putting our remarks on paper, without any delay, as it often happens that when subjects of this nature are committed to memory, others of equal interest soon after occurring, the ideas of both become confounded, and a difficulty is experienced in separating the particulars of each.

Date.	MEMORANDUM.	FOOD.	Places of Resort and Manners.	To what purposes applicable.	Length.	Color.	Color of eyes.	Nav. name.
1819. May 23.	This day we discovered a small animal which was sporting amongst the shoots of the Cocoa Palm: we killed two, which proved to be male and female. On examination we found it to belong to Order 4. Genus 6. Squirrel.	It devoured the young leaves and shoots of the Cocoa Palm. Afterwards having obtained one alive, we found it easily tamed, and that it eagerly drank of the wine made from the Palm-Tree.	We found this species extensively dispersed from lat. —, to lat. —: they associate in large numbers, and on the least noise they lie lengthways along the branches, with their tails extended: at one time we observed them greatly alarmed at the appearance of a snake, which was making its approaches along the branches, and though so terrified that numbers let go their hold and fell to the ground, not any attempted to escape: the snake having taken two or three retired, and the squirrels again resumed their sprightliness; we at various times noticed them devoured by the smaller birds of prey. They build in the apex of a branch, or in a hole in a tree; their time of gestation (we were informed) is five weeks and they produce four at a birth; these are eagerly sought for by the natives, who exchange them with the inhabitants of other islands, where they are kept confined in cages, ingeniously constructed of thin slips of cane: in confinement they feed on pieces of the Banana, and on most kinds of fruit.	When the dry season is nearly over, the inhabitants go in numbers into their places of resort, and kill them by hundreds, either with blunt arrows or sticks: these are procured for the sake of their skins, which are in great request for the purpose of clothing, and every family is expected to present a certain number to their chief every hunting season; besides which they part with them to neighbouring tribes in exchange for cattle, tobacco, and what European produce they can obtain.	Length of the animal, from the tip of the nose to the insertion of the tail, five inches; the tail three inches.	Body grayish brown, with three longitudinal yellowish stripes, tail annulated with black and white.	Irides brownish yellow. Soon after death the eyes lose all the yellow tinge and become blackish.	It is called by the Dutch inhabitants of the Cape, <i>Wheelechorn</i> .
29	Early this morning we were surprised by an immense herd of Antelopes that passed our encampment at about gun-shot distance; we learn that they migrate twice a year, and were now on their route to the South-west, and they return again in about two months; by these migrations they are able to avoid the inconveniences of the rainy season, as also those of extreme drought. The natives as soon as they observe the first herd, dig pit-falls, which they cover with boughs, at the distance of ten or twelve paces apart, in some narrow pass, and often capture several hundreds in one day; they use their flesh for food, and their skins for various domestic purposes.							
June 3.	Saw a small herd of Zebras, but at such a distance as to be beyond the range of our rifles. During the whole of this night we were kept in a state of alarm from the continued howlings of Hyenas, and other wild beasts; but as we kept up large fires, and frequently discharged some of our fire-arms, we suffered no other inconvenience.							

THE FARMER.

BALTIMORE, FRIDAY, SEPTEMBER 10, 1819.

GUINEA GRASS SEED.

Within the last week, we have been kindly furnished with a small parcel of *Guinea Grass Seed*, from Hallowell, District of Maine, where it was received from Jamaica, in July 1818. It has been divided and sent to agricultural societies, in the southernmost states, where there is the best chance of its being successfully cultivated. A small quantity more is expected, which will be, in like manner distributed to agricultural societies in this state.

In addition to what has already been published in this paper concerning this grass, we now copy a notice of it, which we find in *Bryan Edward's History of the West-Indies*, to show in what high estimation it is there held; we can see no reason to doubt that it would be a great acquisition in all our southern states.

May it not, indeed, happen, that this grass, will supply, in those states at least, the great desideratum so much required, to complete the soiling system, by giving a cut of green food, at seasons when no other kind of grass can be relied upon to yield it?

The want of an early cut of grass, coming in before clover and of less difficult cultivation than lucern is well known to every farmer. This deficiency, we are of opinion, might be removed by sowing lots of ground, in good heart, with *Rye*, at this season. Such lots, would give a fine heavy cut, at least three weeks before clover, with which it might be sowed as a protector, and would offer itself to the scythe the three times during the year. In page 214, 15, Edwards says:—

"The other kind, called Guinea grass may be considered as next to the sugar-cane, in point of importance; as most of the grazing and breeding farms, or pens, throughout the island, were originally created, and are still supported, chiefly by means of this invaluable herbage. Hence the plenty of horned cattle, both for the butcher and the planter, is such, that few markets in Europe furnish beef at a cheaper rate, or of better quality, than those of Jamaica. Perhaps the settlement of most of the north-side pa-

rish is wholly owing to the introduction of this excellent grass, which happened by accident about fifty years ago; the seeds having been brought from the coast of Guinea, as food for some birds which were presented to Mr. Ellis, Chief Justice of the island. Fortunately the birds did not live to consume the whole stock, and the remainder, being carelessly thrown into a fence, grew and flourished. It was not long before the eagerness displayed by the cattle to reach the grass, attracted Mr. Ellis' notice, and induced him to collect and propagate the seeds; which now thrive in some of the most rocky parts on the island; bestowing verdure and fertility on lands which otherwise would not be worth cultivation.

The accidental introduction of the Guinea Grass, into Jamaica, and its peculiar adaption to the soil and climate will remind the reader of the first introduction of wheat into Mexico, with a bag of rice, in opening which, Cortes' negro slave, Juan Garrido found three grains, and sowed them in a garden; two of them grew, producing one hundred and eighty grains, which when again sowed, were equally productive. By little and little, (says Gomara) here was raised an infinity of it. (*Cronica de la Nueva Espana*, chap. 231.)

Cortes, that politic savage, in his fourth letter to the emperor, twice importunes him to order plants of all sorts to be transported from Spain to America, as the natives were given to agriculture; and herbs and roots and trees, flourished admirably. He suggests what is worthy of being noticed by more polished statesmen, that orders be given to the Company's Mercantile House (*casa do contra tacion*) in Seville prohibiting vessels from sailing without seeds, and compelling each to bring a portion, §§ xvi, xxiii. And here speaking of the wisdom of that policy, which encourages the introduction from abroad of valuable seeds, animals, &c. &c. we recollect that our attention was drawn to it, soon after the commencement of our humble editorial enterprise, by a letter from a gentleman, whose name our selfishness makes us regret that we are forbidden to mention, as such names would not fail to give respectability to whatever they patronise. On this subject he observes:—

Our seamen, including the supercargoes, with the

various ship officers, have done but little for their country's improvement. They explore every climate, and should always bring home something that might benefit the country—valuable animals, seeds, &c. &c. If the first column of your paper contained a standing admonition upon the subject, pointing out the finest and most desirable stock of each country, the best method of preserving seed, * and what trees, shrubs, plants and grains, are most desirable, the intimation would operate as a stimulus. The beautiful and superior cattle of South America—the pure breed of pacing horses of Chili; the fine hornless milch cattle of Suffolk, and the immense long woolled sheep of Leicestershire, in England; the fine breed of white horses in Sweden, and the thousands of useful and ornamental trees, shrubs, plants, grains and grasses, that we have yet to experiment upon. It is to our merchant ships, we must be indebted for these.

The present Secretary of the Treasury, by his instructions to our Consuls abroad, has paved the way, which there can be no doubt will lead to great improvements in the agricultural productions of our country. Already have we seen seventeen different kinds of grain, sent in virtue of these instructions, and placed for experiment in the hands of H. S. THOMAS, an enterprising farmer in this county.

Thus it is, that man is often indebted for his greatest blessings and benefits, rather to providential accidents, than to his own foresight and management; as the human character itself, is frequently modified and rendered eminent for its virtues, or detestable for its vices, according as it happens to be impelled by external circumstances of a propitious or ruinous tendency. It was, as we are told, for example, a chance, that illumined the genius of Milton. Cromwell died, his son succeeded him and was driven out

* In No. 18, page 141 of this volume, the reader will find particular directions for preserving seeds.

of England; Milton participated his ill fortune; he lost the place of Secretary to the Protector; was imprisoned, released and driven into exile. At last he returned, retired to the country, and there, in the leisure of retreat and disgrace, he executed the poem which he had projected in his youth, and which has placed him in the rank of the greatest of men.

If Shakspeare had been like his father, always a dealer in wool; if his imprudence had not obliged him to quit his commerce, and his country; if he had not associated with libertines, and stole deer from the park of a nobleman; had not been pursued for the theft, and obliged to take refuge in London, engage in a company of actors, and at last disgusted with being an indifferent performer, he had not turned author; the prudent Shakspeare, had never been the celebrated Author; and whatever ability he might have acquired in the trade of wool, his name would never have reflected a lustre on England.

A chance, equally trivial, to all appearance, determined the taste of Moliere for the stage. His grandfather loved the theatre and frequently carried him there—the young man lived in dissipation; the father observing it, asked in anger, if his son was to be made an actor. Would to God, said the grandfather, he was as good an actor as Montrose. Those words struck young Moliere, he took a disgust to his trade, and France owes its greatest comic writer to that accidental reply. Moliere, a skilful tapestry maker, had never else been cited amongst the great men of his nation. Corneille loved, he made verses for his mistress, became a poet, composed *Melite*, the *Cinna*, *Rodogune*, &c. was the honour of his country, and is an object of emulation for posterity. The discreet Corneille had remained a lawyer, and composed briefs that would have been forgotten with the causes he defended. Thus it is, that the death of Cromwell, deer-stealing, the exclamation of an old man, and the beauty of a woman, have given four illustrious characters to Europe.

European grain was first brought to *Quito* by Father Jose Rxi, who sowed it in the grounds of the convent of St. Francis, and the monks to this day exhibit the vase that contained the original grain, as if it were a sacred relic. (*Bonycastle's Compend*, &c. on South America, p. 222) But Humboldt, says a vast deal on the subject in his *Political Essay on New Spain*.

Great Despatch in Wheat Cleaning.—On the 26th day of August, 1819, at Waverly, the seat of Mr. Geo. W. Howard, in Baltimore county, one of Jacob Bromwell's *Patent Fans*, made and sold in this city, by Henry Herring, (and of which an elegant engraving is to be found in the 13th number of the *Baltimore American Farmer*) cleaned twenty-six and a half bushels of chaff wheat in seven minutes and a half. The operation was performed in the presence of several gentlemen of the first respectability, who held their watches, and who have certified the fact.

We should be thankful to any of its members, who will send us a copy of the Constitution of the *Agricultural Society of St. Mary's County*,

with a list of the names of the members. The same request is made of all other Agricultural Societies, which have been or may be formed in the United States. Let others record and mark the changes of constitutions for political government. Be it our business to register those which may be established for the regulation and better management of the *Plough* and the *Harrow*—the *Loom* and the *Dairy*.

AN ANNUAL INDEX.

The subscribers to the *American Farmer*, may expect an *Index* to accompany each volume at the end of the year, which will enable them to turn readily to any particular article they may wish to find.

PRICES.—As to the prices of Country Produce, we have nothing material to say to our subscribers this week. Some change has occurred in Wheat: Red may be quoted at 1 07 to \$1 10; White, at 1 12 to \$1 15; Hay, best Timothy, \$20.

Sixteen vessels arrived at Beverly lately, with from 20 to 60,000 fish each—making a total of 604,000.

The Arkansas territory, over which General Miller is to preside, as Governor, is represented as rich in soil, and having the advantages of an unobstructed and noble river of more than 2000 miles in extent. It is also said to abound in silver, and that with half the labour and expense that is expended in working the mines of Peru and Mexico, a richer abundance of the precious metals might be produced. It is worth "trying" at least.

Agency for Patent and Copy Rights at the Seat of Government.

THE Subscriber respectfully informs Inventors and Authors of every section of the Union, that by suggestion of several scientific gentlemen, he has been induced to open an office of agency for Patent and Copy Rights: wherein will be transacted, for a reasonable compensation, all business requisite for obtaining Patents and other official documents from the Patent Office, and for securing to authors and proprietors, copy-rights for books, maps, &c.

Drawings of Machines, and specifications of their construction, will be carefully made out at this office, which will possess the most ample legal assistance, as well from the books of laws and decisions, as from the obliging aid of the enlightened gentleman at the head of the Patent Office.

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WILLIAM BLAGROVE.

Washington City 19, 1819.

Washington City, March, 1819.

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